

## ABSTRACT OF THE DISCLOSURE

A method is disclosed for synchronizing a data communications network. The data communications network comprises a plurality of existing nodes forming one or more synchronization domains and a node entering the network. Each existing node in a synchronization domain stores a common representation of the synchronization domain and is configured to flood the synchronization domain with domain representation information. In a synchronization domain identification step formed at the entering node, the entering node exchanges entering node domain representation information with a first neighboring existing node. The entering node identifies as a first synchronization domain common with the first neighboring existing node all neighboring existing nodes from which the entering node domain representation information is flooded back the entering node.